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CORRIGENDUM

Appendix B of Embedding topological dynamical systems with periodic points in cubical shift – CORRIGENDUM

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In [**Gut17**, Theorem B.3] there is a mismatch between the statement of the theorem and its proof. In order to correct the situation it is enough to replace the expression *'isomorphic extension'* in the statement of Theorem B.3 and in its proof by the expression *'strongly isomorphic extension'*. We proceed to give the necessary background.

We consider topological dynamical systems (X, T) where X is compact and metric and $T : X \to X$ is a homeomorphism. Recall that a Borel subset of X is called a *full set* if it has measure 1 with respect to any T-invariant Borel probability measure on X.

Recall that an extension $\pi : (X, T) \to (Y, S)$ is called *strongly isomorphic* if there is a full set $E \subset Y$ such that the restriction of π to $\pi^{-1}(E)$ is one-to-one [**Bur19**, §2.3]. This condition is easily seen to be equivalent to the condition that the Borel set

$$\{y \in Y : \ |\pi^{-1}(y)| = 1\}$$

is full (note that the set $\{y \in Y : \ |\pi^{-1}(y)| = 1\} = \bigcap_{n=1}^{\infty} \{y \in Y : \ \mathrm{diam}(\pi^{-1}(y)) < 1/n\}$ is G_δ).

We remark that the equivalence between the small boundary property and the existence of a zero-dimensional strongly isomorphic extension is proven in [**KS20**, Theorem 5.5] using a different terminology. It is an open problem whether the existence of a zero-dimensional isomorphic extension implies the existence of a zero-dimensional strongly isomorphic extension.

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